

Amendments to the Claims:

This listing of claims replaces all prior listings of claims:

Listing of Claims

1. (Currently Amended) A method performed at a data distribution device, the method comprising:

determining whether a first message indicating that data conveyance rules are to be modified has been received from a data output device, the data conveyance rules being identified using a user name for a user associated with the first message and/or a data output device identifier for the data output device, the data conveyance rules pertaining to messages delivered to the data output device subsequent to ~~other than~~ the first message, the data conveyance rules being used by the data distribution device to determine how, when, and under what conditions to send data to the data output device;

if the first message to modify has been received, identifying a rule template associated with the data conveyance rules ~~based on an identification data contained within the first message~~, the identified rule template comprising at least one parameter;

sending, from the data distribution device to the data output device, a second message specifying a user interface corresponding to the rule template and the parameter associated with the data conveyance rules that are to be modified;

determining whether a third message comprising a specification of the parameter has been received from the data output device in response to the third message specifying the user interface; and

if the third message specifying the parameter has been received, creating a rule by binding the rule template with the specified parameter, the created rule thereafter forming part of the data conveyance rules;

wherein the data distribution device maintains a state of the data output device so that data distribution device does not send duplicative data to the data output device.

2. (Original) The method of claim 1, wherein the user interface comprises a natural language description of a business function of a data conveyance rule created with the rule template.
3. (Original) The method of claim 1, wherein the user interface comprises a natural language description of the parameters for the rule template.
4. (Original) The method of claim 1, further comprising:
 - identifying a set of rule templates associated with the data conveyance rules to be modified;
 - sending a message specifying a user interface corresponding to the set of rule templates;
 - and
 - determining whether a message indicating selection of one of the templates in the set has been received.
5. (Original) The method of claim 1, further comprising translating the rule into a rule engine format.
6. (Original) The method of claim 5, wherein the rule engine format comprises Jrules.
7. (Original) The method of claim 1, further comprising:
 - determining whether a message comprising a subscription request has been received;
 - if a subscription request has been received, identifying data conveyance rules associated with the subscription request; and
 - sending data in accordance with the identified rules.
8. (Canceled).
9. (Original) The method of claim 1, further comprising:
 - associating one of the data conveyance rules with a rule template;

parsing the rule to identify specifications for parameters of the template; and
sending a message specifying a user interface corresponding to the associated template,
the identified parameters, and the identified specifications.

10. (Currently Amended) A system comprising:

a data distribution device comprising:

memory operable to store:

a repository comprising data conveyance rules and rule templates
associated with the data conveyance rules, the data conveyance rules being used
by the data distribution device to determine how, when, and under what
conditions to send data to a data output device, and

a rule editor for modifying the data conveyance rules and the rule
templates; and

a processor operable to:

determine whether a first message indicating that a set of the data
conveyance rules to be modified has been received from the data output device,
the data conveyance rules being identified using a user name for a user associated
with the first message and/or a data output device identifier for the data output
device, the data conveyance rules pertaining to messages delivered to the data
output device subsequent to ~~other than~~ the first message,

if the first message to modify has been received, identify a rule template
associated with the set ~~based on an identification data contained within the first~~
~~message~~, the identified rule template comprising at least one parameter,

generate and send, from the data distribution device to the data output
device, a second message specifying a user interface corresponding to the
template and the parameter associated with the data conveyance rules that are to
be modified,

determine whether a third message comprising a specification of the
parameter has been received from the data output device, and

if the third message specifying the parameter has been received, create a rule by binding the rule template with the specified parameter, the created rule thereafter forming part of the data conveyance rules;

wherein the data distribution device maintains a state of the data output device so that data distribution device does not send duplicative data to the data output device;

wherein the data is persisted at the data output device across trips between the data distribution device and the data output device.

11. (Original) The system of claim 10, wherein the processor is further operable to:
 - identify a set of rule templates associated with the set of data conveyance rules to be modified;
 - generate a message specifying a user interface corresponding to the set of rule templates;
 - and
 - determine whether a message indicating selection of one of the templates in the set has been received.
12. (Original) The system of claim 10, wherein:
 - the memory is further operable to store a rule translator; and
 - the processor is further operable to translate the rule into a rule engine format.
13. (Original) The system of claim 10, wherein:
 - the memory is further operable to store a rule engine; and
 - the processor is further operable to:
 - determine whether a message comprising a subscription request has been received,
 - if a subscription request has been received, identify data conveyance rules associated with the subscription request, and
 - send data in accordance with the identified rules.
14. (Original) The system of claim 10, wherein the processor is further operable to:

associate one of the data conveyance rules with a rule template;
parse the rule to identify specifications for parameters of the template; and
generate a message specifying a user interface corresponding to the associated template,
the identified parameters, and the identified specifications.

15. (Currently Amended) An article of manufacture, comprising:
a machine readable storage medium having instructions which when executed by a
machine cause the machine to perform operations of:

determining whether a message sent by a data output device indicating that data
conveyance rules are to be modified has been received at a data distribution device, the
data conveyance rules being identified using a user name for a user associated with the
first message and/or a data output device identifier for the data output device, the data
conveyance rules pertaining to messages delivered to the data output device subsequent
to other than the first message, the data conveyance rules being used by the data
distribution device to determine how, when, and under what conditions to send data to a
data output device;

if the message to modify has been received, identifying, by the data distribution
device, a rule template associated with the data conveyance rules ~~based on an~~
~~identification data contained within the message to modify~~, the identified rule template
comprising at least one parameter;

generating and sending, by the distribution device to the data output device, a
message specifying a user interface corresponding to the rule template and the parameter
associated with the data conveyance rules that are to be modified;

determining, by the data distribution device, whether a message comprising a
specification of the parameter has been received from the data output device; and

if the message specifying the parameter has been received, creating, by the data
distribution device, a rule by binding the rule template with the specified parameter, the
created rule thereafter forming part of the data conveyance rules;

wherein the data is persisted at the data output device across trips between the
data distribution device and the data output device;

wherein a first frame rendered on the data output device continually refreshes to obtain new data and the obtained new data is passed to one or more additional frames rendered on the data output device that require at least a portion of the obtained new data.

16. (Previously Presented) The article of manufacture in claim 15, wherein the machine readable storage medium provides instructions, which when executed by a machine cause the machine to perform operations of:

identifying a set of rule templates associated with the data conveyance rules to be modified;

generating a message specifying a user interface corresponding to the set of rule templates; and

determining whether a message indicating selection of one of the templates in the set has been received.

17. (Previously Presented) The article of manufacture in claim 15, wherein the machine readable storage medium provides instructions, which when executed by a machine cause the machine to perform operations comprising translating the rule into a rule engine format.

18. (Previously Presented) The article of manufacture in claim 15, wherein the machine readable storage medium provides instructions, which when executed by a machine cause the machine to perform operations comprising:

determining whether a message comprising a subscription request has been received;
if a subscription request has been received, identifying data conveyance rules associated with the subscription request; and
sending data in accordance with the identified rules.

19. (Previously Presented) The article of manufacture in claim 15, wherein the machine readable storage medium provides instructions, which when executed by a machine cause the machine to perform operations of:

associating one of the data conveyance rules with a rule template;
parsing the rule to identify specifications for parameters of the template; and

generating a message specifying a user interface corresponding to the associated template, the identified parameters, and the identified specifications.

20. (Currently Amended) A method of managing data conveyance between a data distribution device and a data output device, the method performed at the data output device comprising:

determining whether a command to modify data conveyance rules is received, the data conveyance rules being identified using a user name for a user associated with the first message and/or a data output device identifier for the data output device, the data conveyance rules being used by the data distribution device to determine how, when, and under what conditions to send data to the data output device, the command being initiated by the data output device;

if the command to modify has been received, sending a message to the data distribution device indicating that the data conveyance rules are to be modified including identification data contained within the message ~~to modify~~ for specifying the data conveyance rules that are to be modified, the data conveyance rules pertaining to messages subsequently delivered to the data output device;

determining if a message specifying a user interface corresponding to a rule template and a parameter associated with the data conveyance rules that are to be modified has been received from the data distribution device;

if the message specifying the user interface has been received, generating the specified user interface;

determining whether a command indicating specification of the parameter has been received via the generated user interface; and

if the command specifying the parameter has been received, sending a message comprising a specification of the parameter to the data distribution device for modifying the data conveyance rules for subsequent data delivery by the data distribution device;

wherein the data is persisted at the data output device across trips between the data distribution device and the data output device;

wherein the data distribution device maintains a state of the data output device so that data distribution device does not send duplicative data to the data output device;

wherein the data is persisted at the data output device across trips between the data distribution device and the data output device.

21. (Original) The method of claim 20, wherein the user interface comprises a natural language description of a business function of a data conveyance rule created with the rule template.
22. (Original) The method of claim 20, wherein the user interface comprises a natural language description of the parameter for the rule template.
23. (Original) The method of claim 20, further comprising:
 - determining whether a message specifying a user interface corresponding to a set of rule templates has been received;
 - if the message has been received, generating the user interface;
 - determining whether a command indicating that one of the templates in the set has been selected has been received; and
 - if the command has been received, sending a message indicating selection of one of the templates in the set.
24. (Canceled).
25. (Currently Amended) A system for managing data conveyance between a data distribution device and a data output device comprising:
 - a data output device comprising:
 - a user input device operable to receive a user command;
 - a display device operable to present a user interface; and
 - a processor operable to perform steps of:
 - determining whether a command to modify data conveyance rules is received, the data conveyance rules being used by the data distribution device to determine how, when, and under what conditions to send data to the data output device, the command being initiated by the data output device,

if the command to modify has been received, sending a message to the data distribution device indicating that the data conveyance rules are to be modified, such message including identification data for specifying the data conveyance rules that are to be modified, the identification data identifying an identifier of the data output device, the data conveyance rules pertaining to messages subsequently delivered to the data output device,

determining if a message specifying a user interface corresponding to a rule template and a parameter associated with the data conveyance rules that are to be modified has been received from the data distribution device,

if the message specifying the user interface has been received, generating the specified user interface,

determining whether a command indicating specification of the parameter has been received via the generated user interface, and

if the command specifying the parameter has been received, generating and sending a message comprising a specification of the parameter to the data distribution device for modifying the data conveyance rules for subsequent data delivery by the data distribution device;

wherein the data is persisted at the data output device across trips between the data distribution device and the data output device;

wherein the data distribution device maintains a state of the data output device so that data distribution device does not send duplicative data to the data output device;

wherein the data is persisted at the data output device across trips between the data distribution device and the data output device.

26. (Original) The system of claim 25, wherein the processor is further operable to:
- determine whether a message specifying a user interface corresponding to a set of rule templates has been received;
 - if the message has been received, generate the user interface;
 - determine whether a command indicating that one of the templates in the set has been selected has been received; and

if the command has been received, generating a message indicating selection of one of the templates in the set.

27. (Currently Amended) An article of manufacture, comprising:

a machine readable storage medium having instructions which when executed by a machine cause the machine to perform operations of:

determining whether a command to modify data conveyance rules is received at a data output device, the data conveyance rules being used by the data distribution device to determine how, when, and under what conditions to send data to the data output device, the command being initiated by the data output device;

if the command to modify has been received, sending a message to a data distribution device indicating that the data conveyance rules are to be modified, such message including identification data for specifying the data conveyance rules that are to be modified, the identification data identifying a user name for a user of the data output device, the data conveyance rules pertaining to messages subsequently delivered to the data output device;

determining if a message specifying a user interface corresponding to a rule template and a parameter associated with the data conveyance rules that are to be modified has been received from the data distribution device;

if the message specifying the user interface has been received, generating the specified user interface;

determining whether a command indicating specification of the parameter has been received via the generated user interface; and

if the command specifying the parameter has been received, generating and sending a message comprising a specification of the parameter to the data distribution device for modifying the data conveyance rules for subsequent data delivery by the data distribution device;

wherein the data is persisted at the data output device across trips between the data distribution device and the data output device;

wherein the data distribution device maintains a state of the data output device so that data distribution device does not send duplicative data to the data output device;

wherein the data is persisted at the data output device across trips between the data distribution device and the data output device.

28. (Previously Presented) The article of manufacture in claim 27, wherein the machine readable storage medium provides instructions, which when executed by a machine cause the machine to perform operations of:

determining whether a message specifying a user interface corresponding to a set of rule templates has been received;

if the message has been received, generating the user interface;

determining whether a command indicating that one of the templates in the set has been selected has been received; and

if the command has been received, generating a message indicating selection of one of, the templates in the set.

29. (Currently Amended) A system comprising:

a data output device; and

a data distribution device;

the data output device operable to:

determine whether a command indicating that data conveyance rules are to be modified has been received from the data distribution device, the data conveyance rules being used by the data distribution device to determine how, when, and under what conditions to send data to the data output device,

if the command has been received, send a message to the data distribution device indicating that data conveyance rules are to be modified, the message including identification data identifying a user of the data output device, the data distribution device associating the user with a set of rule templates,

determine if a message specifying a user interface corresponding to the [[a]] set of rule templates has been received from the data distribution device, the user interface comprising natural language descriptions of business functions of data conveyance rules created with the templates,

if the message has been received, generate the user interface,

determine whether a command indicating that one of the templates in the set has been selected has been received,

if the command has been received, send a message to the data distribution device indicating selection of one of the templates in the set,

determine if a message specifying a user interface corresponding to the selected rule template and a parameter of the selected rule template has been received from the data distribution device, the user interface comprising a natural language description of the parameter,

if the message has been received, generate the user interface,

determine whether a command indicating specification of the parameter has been received, and

if the command has been received, send a message comprising a specification of the parameter to the data distribution device; and
the data distribution device operable to:

determine whether the message indicating that data conveyance rules are to be modified has been received from the data output device,

if the message has been received, identify a set of rule templates associated with the data conveyance rules to be modified,

send the message specifying a user interface corresponding to a set of rule templates to the data output device,

determine whether the message indicating selection of one of the templates in the set has been received from the data output device,

identify a parameter for the selected template,

send the message specifying a user interface corresponding to the selected rule template and a parameter of the selected rule template to the data output device,

determine whether the message comprising a specification of the parameter has been received,

if the message has been received, create a rule by binding the rule template with the specified parameter, the created rule thereafter forming part of the data conveyance rules,

translate the rule into a rule engine format,

determine whether a message comprising a subscription request has been received from the data output device,

if a subscription request has been received, identify data conveyance rules associated with the subscription request, and

send data in accordance with the identified rules to the data output device;

wherein the data is persisted at the data output device across trips between the data distribution device and the data output device;

wherein the data distribution device maintains a state of the data output device so that data distribution device does not send duplicative data to the data output device;

wherein the data is persisted at the data output device across trips between the data distribution device and the data output device.

30. (New) A method as in claim 1, wherein the data is persisted at the data output device across trips between the data distribution device and the data output device.

31. (New) A method as in claim 30, wherein a first frame rendered on the data output device continually refreshes to obtain new data and the obtained new data is passed to one or more additional frames rendered on the data output device that require at least a portion of the obtained new data.